primary studies - published RCT

Telemonitoring in Cystic Fibrosis: A 4-year Assessment and Simulation for the Next 6 Years.

Code: PM27142963 **Year:** 2016 **Date:** 1983 **Author:** Tagliente I

Study design (if review, criteria of inclusion for studies)

randomized, double-blind study

Participants

cystic fibrosis patients 11-30 years of age with an acute exacerbation of their pulmonary disease

Interventions

ticarcillin-tobramycin, azlocillin-tobramycin, or azlocillin-placebo for 10 days

Outcome measures

Shwachman scores and pulmonary function tests, sputum colture, FEV1, FVC

Main results

There was significant improvement in Shwachman scores and pulmonary function tests. Concentrations of sputum bacteria were significantly reduced, but after therapy patients had a mean of 10(7) bacteria/ml of sputum. Pseudomonas was transiently eliminated in only one patient. The three regimens had similar impacts on pulmonary function and sputum bacterial concentration. Antibiotic resistance was noted more frequently in the azlocillin-placebo group, but this trend was not statistically significant. Improvement in pulmonary function did not correlate with bacteriological response. Four weeks after discharge, 62% of the improvement in forced expiratory volume in one second and 75% of the improvement in vital capacity remained, but concentrations of sputum bacteria had returned to pretreatment levels, and antibiotic-resistant bacteria persisted.

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See also

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Keywords

Adolescent; Adult; Anti-Bacterial Agents; Azlocillin; Child; Combined Modality Therapy; Penicillins; pharmacological_intervention; Ticarcillin; Tobramycin; Bacterial Infections; Respiratory Tract Infections; Respiratory Tract Diseases; Infection; Exacerbation; Pseudomonas aeruginosa; Pseudomonas; Aminoglycosides;